

Work Order ID 52638

October 5, 2009 11:06:34 AM



Page 1

Item ID: D3649-041

Accept



Setup Start



Revision ID: B

Item Name: Tunnel Bottom Panel Assembly

Stop



Start Date: 10/05/09 Start Qty: 10.00



Cust Item ID:

Required Date: 10/12/09 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3649

Rev B

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3649 Dwg Rev: B Prog Rev: B 2-
Deburr if necessary

B 9-10-8

10

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

B 9-10-5

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

2) Sorbis/07

410

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 52638

October 5, 2009 11:06:34 AM



Page 2

Item ID: D3649-041

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Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Brake NC

Brake NC

NC BRAKE

Memo

Form as per Dwg D3649

0.00

0.00

8/09/11/19

10 8

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8/09/11/19

10 4

150



Small Fab

Small Fab

Small Fab

Memo

1- Form dimple for MS20427M3 rivet per dwg D3649 *****ensure dimples are on the proper side***** 2-Assemble nutplates as per dwg D3649

0.00

0.00

8/09/11/25 10x

Work Order ID 52638

October 5, 2009 11:06:35 AM

Page 3

Item ID: D3649-041

Accept

Revision ID: B

Item Name: Tunnel Bottom Panel Assembly

Setup Start

Stop

Start Date: 10/05/09 Start Qty: 10.00

Required Date: 10/12/09 Req'd Qty: 10.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

2> 802/11/24

(10)

170

Identify as per dwg & Stock Location: 87190

0.00



Packaging

Memo

0.00

Packaging

09/14/22 (10)

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/11/2024

09/11-26

(10)

Picklist Print

October 5, 2009 11:06:33 AM

Page 1

Work Order ID: 52638

Parent Item: D3649-041 RevB

Parent Item Name: Tunnel Bottom Panel Assembly

Start Date: 10/05/09

Required Date: 10/12/09

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

M304S26GA

Purchased

No

150

sf

154.8200

63.8842



304/316 0.018 SHEET

B9-10-5

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

MAT

154.82

105591

0.39

107021

1.21

108415

3.19

109398

150.03

MS20427M3-3

Purchased

No

110

Each

368.0000

880.0000



Rivet

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST

368

110022

115

111819

253

MS21060-3K

Purchased

No

150

Each

392.0000

220.0000



Nut Plate

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST

392

109590

392

109398
E 509/11/25
M 112933
352
E 509/11/25
820

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

October 5, 2009 11:06:33 AM

Page 2

Work Order ID: 52638

Parent Item: D3649-041RevB

Parent Item Name: Tunnel Bottom Panel Assembly

Comments:

Start Date: 10/05/09

Required Date: 10/12/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21062-3K		Purchased	No			150	Each	480.0000	220.0000			



Nut Plate



Handwritten: 09/11/25

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST	480
105938	4
109438	1
109590	475

Handwritten: 220

October 5, 2009 11:06:33 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 52638
Description: Tunnel Bottom Panel		Part Number: D3649-1
Inspection Dwg: D3649	Rev: B	Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

☒

First Article

☐

Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	.102	*			
Ø0.196	+0.005/-0.001	.194	*			
Ø0.250	+0.005/-0.001	.252	*			
0.400	+/-0.010	.406	*			
0.385	+/-0.010	.383	x			
0.250	+/-0.010	.251	*			
44.57	+/-0.030	44.57	*			
11.70	+/-0.030	11.70	*			
3.370	+/-0.030	3.368	x			
13.76	+/-0.030	13.76	*			
4.300	+/-0.010	4.397	*			
10.11	+/-0.030	10.106	*			
12.90	+/-0.030	12.875	*			
16.61	+/-0.030	16.61	x			
15.80	+/-0.030	15.80	*			
3.950	+/-0.010	3.949	x			
0.42	+/-0.030	.417	x			
0.41	+/-0.030	.408	x			
0.85	+/-0.030	.857	*			
19.64	+/-0.030	19.630	x			
0.54	+/-0.030	.530	*			
1.400	+/-0.010	1.397	*			
2.63	+/-0.030	2.625	x			
2.93	+/-0.030	2.905	x			
1.49	+/-0.030	1.492	*			
5.98	+/-0.030	5.983	x			
0.54	+/-0.030	.545	x			
2.20	+/-0.030	2.190	*			
2.75	+/-0.030	2.746	x			
2.48	+/-0.030	2.476	*			

8/1/05

DART AEROSPACE LTD		Work Order:	52638
Description: Tunnel Bottom Panel		Part Number:	D3649-1
Inspection Dwg: D3649	Rev: B	Page 2 of 2	

FIRST ARTICLE INSPECTION CHECKLIST

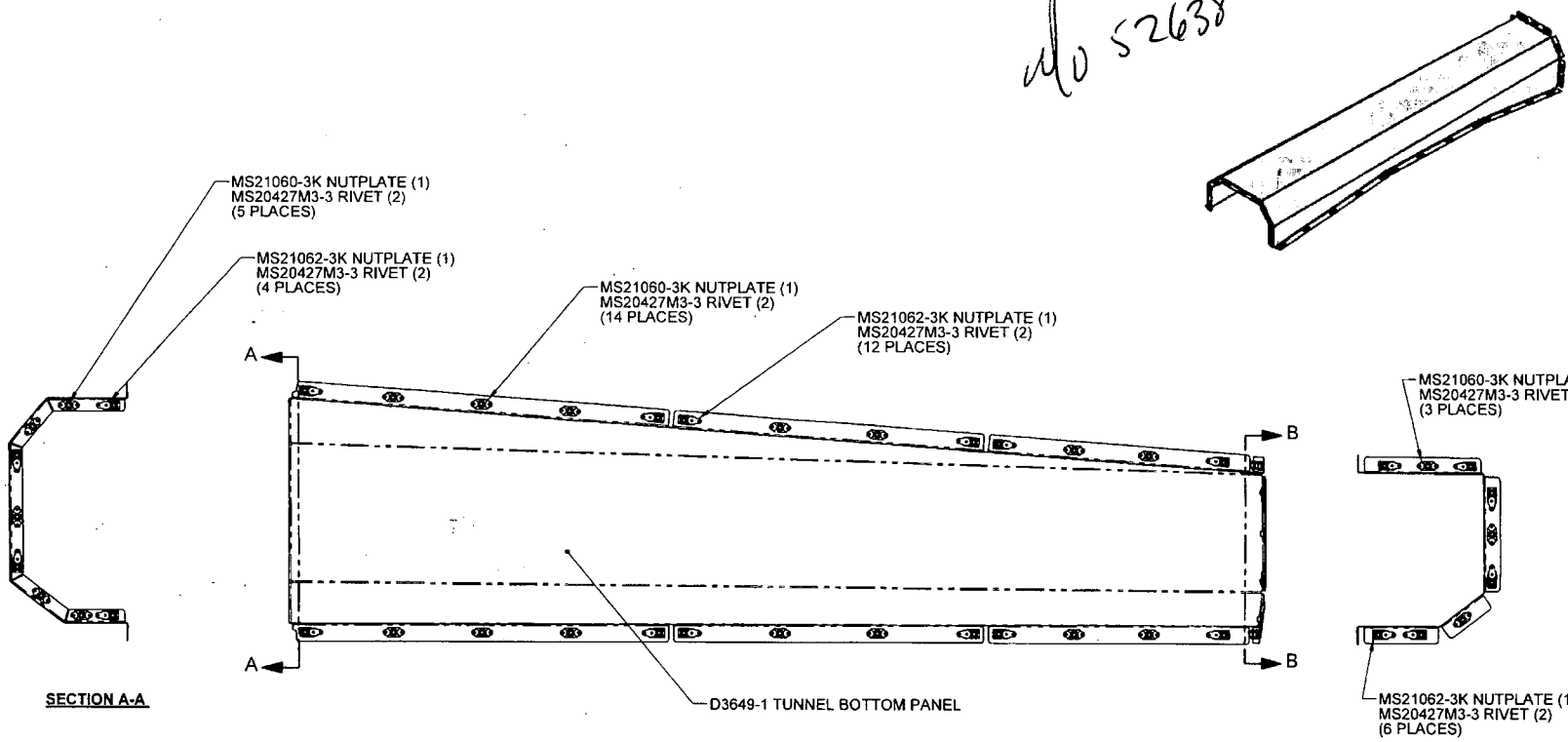
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.16	+/-0.030	1.162	*			
3.38	+/-0.030	3.377	*			
2.00	+/-0.030	1.996	*			
0.90	+/-0.030	.896	*			
16.64	+/-0.030	16.64	✓			
0.48	+/-0.030	.481	*			
13.80	+/-0.030	13.80	*			
0.46	+/-0.030	.457	*			
11.76	+/-0.030	11.750	*			
1.23	+/-0.030	1.23	*			
0.88	+/-0.030	.888	*			
18.46	+/-0.030	18.46	*			
5.23	+/-0.030	5.234	*			
1.932	+/-0.010	1.932	✓			
1.943	+/-0.010	1.942	*			
5.02	+/-0.030	5.017	*			
1.820	+/-0.010	1.817	*			
0.70	+/-0.030	.702	*			
2.100	+/-0.010	2.100	*			
2.33	+/-0.030	2.327	*			
0.94	+/-0.030	.938	*			
3.30	+/-0.030	3.287	*			
1.900	+/-0.010	1.898	*			
0.61	+/-0.030	.611	*			

Measured by: B	Audited by: S	Prototype Approval:	N/A
Date: 9-10-07	Date: 09/10/07	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.04.17	New Issue	KJ/DD	DS

40 52638



SECTION A-A

D3649-1 TUNNEL BOTTOM PANEL

SECTION B-B

D3649-041 BOTTOM PANEL ASSEMBLY

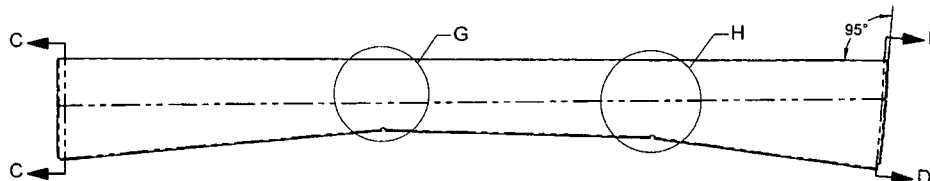
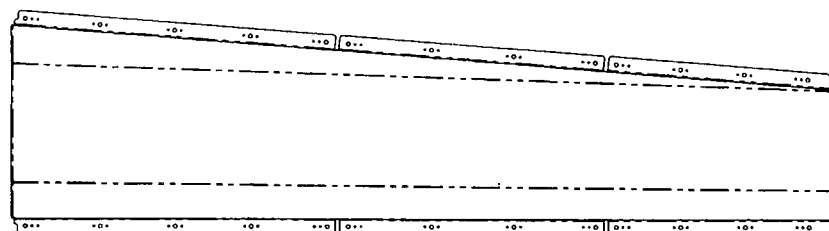
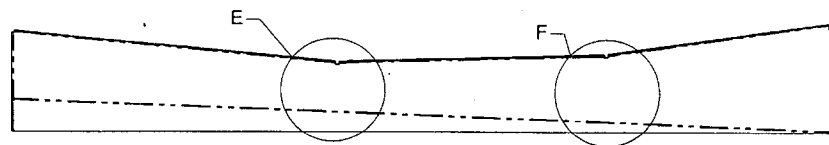
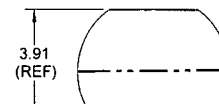
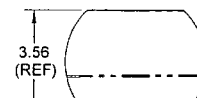
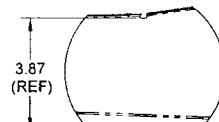
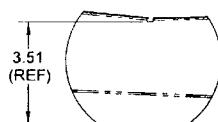
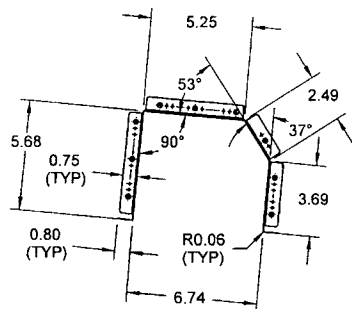
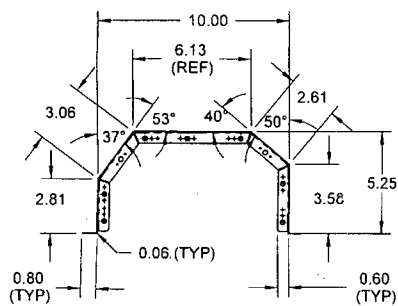
PART LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3649-041	TUNNEL BOTTOM PANEL ASSY.
1	D3649-1	TUNNEL BOTTOM PANEL
88	MS20427M3-3	RIVET
22	MS21060-3K	NUTPLATE
22	MS21062-3K	NUTPLATE

RELEASED
28-03-28/11



B	PAGE 3: MS20427M3 WAS MS20427M-3	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	IE	DRAWING NO.	REV. B
MFG. APPR.	AC	D3649	SHEET 1 OF 3
APPROVED	AC	TITLE	SCALE
DE APPR.	AC	BOTTOM PANEL ASSEMBLY 1:5	
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W052638



D3649-1 TUNNEL BOTTOM PANEL
(MAKE FROM D3649-1F)

RELEASED
08-03-27/14

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3649	REV. B
MFG. APPR.			SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		BOTTOM PANEL ASSEMBLY	1:6
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